

## REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

◆ Rejection of Claims 8-18, 20, 21, 27-32, and 77 Under 35 USC §§102(b) in view of U.S. Patent No. 5,344,808 (Watanabe)

This rejection is respectfully traversed on the grounds that the Watanabe patent does not disclose a diffraction structure that is altered to individualize data carriers in the manner claimed.

The Watanabe patent is directed to a method of permanently imprinting an image on a data carrier in a way that makes alteration difficult. While a diffraction pattern in the form of a “white-light production type hologram” is included in the data carrier of Watanabe, there is no suggestion of altering the hologram to individualize cards in the manner claimed.

According to the Examiner, elements 300 and 400 illustrated in Figs. 12 and 15 of the Watanabe patent correspond to the alterations in contour recited, for example, in **claim 8**. However, the corresponding description in cols. 30-32 does not include any suggestion of altering the contour of an individual data carrier relative to other corresponding data carriers in the same system. The data carriers of Watanabe are already individualized by the images protected by the machine-readable diffraction gratings 300 and 400, and there is no apparent need to individualize the “diffraction gratings” themselves. In fact, in order to authenticate individual images associated with diffraction gratings, it is generally thought desirable to use the same diffraction grating for each data carrier, so that the alteration of the diffraction grating by a forger attempting to vary the individual image can more easily be detected. It is respectfully submitted that a teaching, such as the one in Watanabe, of how to make a diffraction grating that includes contours, does not imply that individual diffraction gratings, or subsets of a set of such gratings, should be altered to individualize the corresponding data carriers.

In the first complete paragraph on page 3 of the Official Action, the Examiner states that “[r]egarding *claims 14 and 16*, Watanabe discloses the data carrier comprising a metal layer of colored appearance or one layer being colored (line 40 to line 57 of col. 11).” This statement is incorrect for at least three reasons. First, the cited passage concerns a transfer ribbon for printing an image on the data carrier, and not a diffraction pattern. Second, there is no suggestion of a colored metal layer, much less one included in diffraction structures. Third, there is no suggestion of varying the colors between data carriers as claimed. Watanabe’s disclosure that the image may be multi-colored is not the same as a disclosure the color may be varied to individualize cards, much less that the color of a metal layer in a diffraction pattern may be so altered.

Similarly, the last paragraph on page 3 of the Official Action refers to the teaching in col. 13, lines 54 *et seq.* as teaching a variable element colored with various different substances, including dyes, luminescent substances, and so forth, as recited in **claims 17 and 20**. However, the cited passage in the specification does not refer to a diffraction pattern, or individualization of the pattern by altering colors in the manner claimed, but to the contrary refers to the composition of a machine-readable “information pattern printed layer” that is provided between a release layer and the hologram forming layer. There is no disclosure that the hologram forming layer should be colored in the manner claimed, and in fact no disclosure luminescent substances or transparent luminescent substances as suggested in the Official Action.’

The coloring described in this portion of the Watanabe patent does not individualize the card, but to the contrary makes it difficult to see the machine readable information pattern layer, as explained in col. 13, lines 63-66 (“*it can be made difficult for the information pattern printed layer to be visible to the naked eye*”). As a result, the passage actually **teaches away** from use of color for individualization, since the objective of the colorization described by Watanabe is to cause the information pattern printed layer to blend into the background so that it is not easily visible.


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Because the Watanabe patent fails to disclose or suggest any of the claimed diffraction structure alterations, for the purpose of individualizing data carriers or subsets of a system of data carriers, it is respectfully submitted that the rejection of claims 8-18, 20, 21, 27-32, and 77 is improper and withdrawal of the rejection is respectfully requested.

Having thus overcome the sole rejection made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC

A handwritten signature in dark ink, appearing to read 'B. Urcia', with a long horizontal flourish extending to the right.

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